

# PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT FOR RESTORATION OF THE SALTON SEA ECOSYSTEM AND PRESERVATION OF ITS FISH AND WILDLIFE RESOURCES

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## Summary of Scoping Meeting Comments and Responses to the Notice of Preparation

The California Departments of Water Resources (DWR) and Fish and Game (DFG) have been charged with preparing a Programmatic Environmental Impact Report (PEIR), on behalf of the Secretary of Resources, for restoration of the Salton Sea ecosystem and preservation of its fish and wildlife resources. In compliance with the California Environmental Quality Act (CEQA), DWR and DFG, as co-lead agencies, prepared a Notice of Preparation (NOP) for the PEIR on February 27, 2004 and mailed it to over 300 responsible and involved agencies and interested organizations and individuals. To solicit additional comments on the scope and content of the PEIR, DWR and DFG held five public scoping meetings throughout California during mid- to late-March. The following table lists the logistical details for each public meeting.

Date	City	Location	Time	Approximate Attendance
March 16	Coachella	Desert Alliance for Community Empowerment 53-990 Enterprise Way	7 to 9 p.m.	50
March 17	El Centro	Imperial Irrigation District Auditorium 1285 Broadway	6 to 8 p.m.	40
March 18	San Diego	San Diego County Water Authority 4677 Overland Avenue	7 to 9 p.m.	20
March 22	Sacramento	Resources Building Auditorium 1416 Ninth Street	2 to 4 p.m.	30
March 24	Oakland	Elihu M. Harris State Building 1515 Clay Street	7 to 9 p.m.	10

In addition to public scoping meetings, the U.S. Department of Interior - Bureau of Indian Affairs arranged a scoping meeting for several Indian tribes with DWR on March 16, 2004 at the Torres-Martinez Tribal Headquarters, 66-725 Martinez Road, Thermal, California. About 14 people attended that meeting.

This report summarizes the written responses to the NOP and the major themes and/or comments from various scoping meetings. The five scoping meeting attracted over 150 people, many of whom provided oral comments on the environmental compliance process, scope and content of the PEIR, and the legislative authority and mandate for conducting the restoration feasibility study.

DWR and DFG received over 70 written responses to the NOP during the specified comment period of February 27 through April 16. The written comments received are attached as an Appendix to this report. The table below is a listing of those agencies, organizations and individuals that submitted written comments.

## Agencies, Organizations, and Individuals that Submitted Written Comments on the NOP

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### Federal Agencies and Tribes (8)

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Congressman Bob Filner (California, 51st District)  
 Department of the Interior, Bureau of Land Management (BLM)  
 Department of Interior, Bureau of Indian Affairs (BIA) – 2 letters  
 Department of Interior, Fish and Wildlife Service (FWS)  
 United States Environmental Protection Agency – Region IX  
 United States Geological Service (USGS)  
 The Torres Martinez Desert Cahuilla Indian Tribe

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### California Agencies, Districts, and Local Jurisdictions (14)

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California Air Resources Board  
 California Department of Food & Agriculture  
 California Department of Transportation  
 California Regional Water Quality Control Board – Colorado River Basin Region  
 City of Brawley  
 Imperial County Air Pollution Control District  
 Imperial County Planning/Building Department  
 Imperial Irrigation District  
 Imperial Valley Farm Bureau  
 Metropolitan Water District of Southern California  
 Salton Sea Authority  
 San Diego County Water Authority  
 South Coast Air Quality Management District  
 State Water Resources Control Board

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### Colorado River Basin State Agencies/Organizations (6)

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Arizona Department of Water Resources  
 Arizona Game and Fish Department  
 Colorado River Commission of Nevada – 2 letters  
 Utah Department of Natural Resources  
 Wyoming State Engineer's Office

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### Environmental Organizations or Groups (2)

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Environmental Defense  
 Salton Sea Coalition

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### Individuals and Private Companies (44)

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Marie Barrett	Cliff Hurley	Sandra Walker, Solar Bee
Resan Bingham	Mike Maier	R.C. Wymore
Quentin and Ellen Burke	Patrick J. Maloney	Form Letter (32 individuals)
Ted Deckers	Steven Petroff	
Jack Hart	George Ray	

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The major themes and/or issue areas expressed as part of written and oral comments on the NOP are summarized below under “Scope and Content of the PEIR”. More specific comments on the scope and content of the NOP are categorized under “ Specific Comments”. Finally, comments or statements not directly pertinent to the scope and content of the PEIR are summarized under “Other Comments”.

## **Scope and Content of the PEIR**

Many of the written and oral comments on the NOP can be summarized or grouped into several major themes or topics. Some of the more prevalent themes expressed were: (1) in addition to the fish and wildlife, air quality and water quality objectives of the project, the PEIR should also identify potential recreational and economic development opportunities at and around the Sea; (2) the PEIR should develop and clearly define the specific goals, objectives, and performance standards that will guide the alternative formulation and assessment process; (3) the PEIR should clearly define what is meant by “restoration” of the Salton Sea ecosystem; (4) the PEIR should accurately monitor, assess, and fully mitigate potential air quality impacts associated with implementation of a preferred action; (5) Tribal trust assets should be protected; (6) the PEIR should analyze existing and projected water quality and quantity for the Sea; and (7) restoration alternatives should focus on the Sea.

### **Expand Project Description**

As stated in the NOP, in October 2003 three bills became law - Senate Bill 277 (Ducheny), SB 317 (Kuehl), and SB 654 (Machado) [respectively, Chapter 611, 612, and 613, Statutes of 2003] - for the purpose of facilitating implementation of the Colorado River Quantification Settlement Agreement (QSA). The QSA, and over 30 related agreements, provide a mechanism by which local water agencies are reducing their use of Colorado River water to California’s basic interstate apportionment of 4.4 million acre-feet annually. The QSA implementing legislation required that the State of California undertake restoration of the Salton Sea ecosystem and permanent protection of the wildlife dependent on the sea. The QSA implementing legislation further required that “the preferred alternative shall provide to the maximum extent feasible attainment of the following objectives: (1) Restoration of long-term stable aquatic and shoreline habitat for the historic levels and diversity of fish and wildlife that depend on the Salton Sea; (2) Elimination of air quality impacts from the restoration projects; and (3) Protection of water quality.”

Many respondents felt the QSA implementing legislation, as interpreted by the lead agencies, inappropriately limited the scope of the PEIR and formulation and evaluation of alternatives and suggested expanding the scope of the document to include potential recreational and socioeconomic opportunities. Some suggested that funds generated by developing recreational opportunities could help pay for the restoration effort. Several of those commenting recommended that any preferred plan attempt to leverage opportunities for providing economic stability and growth for local communities around the Sea consistent with support for a thriving agricultural economy in the Coachella and Imperial Valleys.

### **Develop Specific Goals and Objectives**

Congress, in 1998, enacted the Salton Sea Reclamation Act, Public Law 105-372, to help advance restoration of the Sea. That law specified certain criteria to guide evaluation of the various restoration options, including (1) continue to use the Sea as a reservoir for irrigation drainage; (2) reduce and stabilize the overall salinity of the Sea; (3) stabilize surface elevation of the Sea; (4) reclaim, in the long-term, healthy fish and wildlife resources and their habitats; and (5) enhance the potential for recreational uses and economic development of the Sea.

In 2000, the U.S. Bureau of Reclamation (USBR) and the Salton Sea Authority (SSA) prepared a draft EIS/EIR on restoration of the Salton Sea. That report identified the following project objectives: (1) maintain the Sea as a repository for agricultural drainage; (2) provide a safe, productive environment at the Sea for resident and migratory birds and endangered species; (3) restore recreational uses at the Sea; (4) maintain a viable sport fishery at the Sea; and (5) enhance the Sea to provide economic development opportunities. The draft EIS/EIR was never finalized and no actions were taken to implement any of the alternatives described therein.

Many respondents pointed out the discrepancy between the project goals and objectives as outlined in the QSA implementing legislation and those specified the Salton Sea Reclamation Act and the USBR/SSA effort. Many felt DWR and DFG were interpreting the State legislation too narrowly and encouraged the lead agencies to adopt a broader scope of objectives as specified in earlier efforts or, at the very least, define more specific project objectives needed to adequately formulate and evaluate alternatives, although others believed that the restoration effort should closely follow the statutory provisions. Others were concerned that the lead agencies would emphasize alternatives for ecosystem restoration with little regard to the potential effects to people living around the Sea.

### **Define what “Restoration” Means**

Various commenters pointed out that the meaning of “restoration” needs to be defined as it applies to this artificially created ecosystem whose fishery is almost all non-native. Most ecosystem restoration projects, such as the Bay-Delta or the Everglades, entail re-establishing some level of self-sustaining historical conditions at the project site. Historical conditions at the Sea have varied widely – at times it has been a dry salt flat or marsh area or hypersaline lake. The present Sea began as a freshwater lake and transitioned to hypersaline conditions, with accompanying changes in fish species. Is the goal to “restore” the Sea to a 1960s-1970s condition, and to intensively maintain it in that condition? In terms of defining a baseline for restoration, the PEIR should clearly describe historical conditions from pre-1905 to pre-tilapia and post-tilapia fish introductions, and the ecological changes that occurred in response to changing inflow and water quality conditions.

Also, the definition of restoration needs to encompass an understanding of what the statutory requirements for permanent protection of wildlife, and historic levels and diversity of fish and wildlife mean.

### **Fully Address Potential Air Quality Impacts**

As a result of the approved water transfers between Imperial Irrigation District (IID) and San Diego County Water Authority (SDCWA) and Coachella Valley Water District (CVWD) the amount of inflow to the Salton Sea is expected to decrease, resulting in a decline in its surface water level and corresponding exposure of as much as 77,000 acres (120 square miles) of previously inundated sediments. Consequently, many, including the responsible air districts near the Sea, expect a significant increase in PM10 emissions (inhalable particulate matter) with attendant increases in ambient air pollution levels and associated public health concerns. However, the water transfer agencies are required to mitigate for impacts of the transfers, including air quality impacts. Specific mitigation requirements are included in the State Water Resources Control Board's Order 2002-13 for the transfers.

Several respondents expressed concern that actions taken to protect the Salton Sea ecosystem could exacerbate current air quality problems by cumulatively contributing to a net increase in several pollutants for which Imperial and Riverside Counties are considered in non-attainment under applicable federal or state ambient air quality standards. Many of the comments stressed the importance of early consultation with State and local air quality agencies during development and evaluation of alternatives and the need for better baseline air quality and meteorological data, salt mineralogy, and emissivity modeling of the exposed lakebed.

Comments stressed the importance of thoroughly evaluating and implementing all feasible mitigation measures for potential air quality impacts throughout all phases of the project and the need for including a comprehensive dust control plan in the PEIR that addresses possibly significant fugitive dust issues that may occur. The PEIR should also consider the impacts of changes in land use enabled by restoration (e.g., recreational developments) on future air pollution levels. Many expressed a need to include projects that would not only mitigate potential air quality impacts associated with implementation of a preferred alternative, but would also improve regional air quality.

### **Protect Indian Trust Assets**

There are six federally recognized Indian Reservations comprising nearly 120,000 acres within the Salton Sea watershed. The Torres-Martinez Desert Cahuilla Indian Reservation is the largest individual non-federal landowner under and surrounding the Sea with more than 22,000 acres (10,000 acres of which is presently overlain by the Sea). The Torres-Martinez Indian Tribe's traditional ancestral territory has long been associated with ancient Lake Cahuilla (a precursor to the present Salton Sea). The territory consists of natural features, landscapes, traditional properties, and sacred and historic sites associated with ancient Lake Cahuilla and considered important to tribal heritage and for cultural stability.

The U.S. Department of Interior, Bureau of Indian Affairs holds legal title in trust for the lands and natural resources of federally recognized Indian Reservations in the Coachella Valley and has responsibilities to protect Indian trust assets including accounts, land, natural resources, minerals, air, and water. Because of their fiduciary trust responsibilities, the BIA has requested that the lead agencies formally consult and advise the tribes on any actions that can potentially affect tribal assets having sustained values, character, or cultural importance for the tribes.

Several other respondents also expressed the need to protect tribal assets and assist the tribes in retaining and rediscovering as much of their cultural heritage as possible, while assuring that any project ultimately proposed will allow them to live and enjoy their land for generations to come.

### **Evaluate Impacts to Water Quality and Quantity**

As described in the NOP, the Salton Sea is a hypersaline, eutrophic (nutrient-rich) lake and repository for agricultural drainage and municipal wastewater from the Imperial, Coachella, and Mexicali Valleys. The Regional Water Quality Control Board - Colorado River Basin Region, lists the Sea, as well as its four main tributaries – the New and Alamo Rivers, Coachella Valley Stormwater Channel, and Imperial Valley Drains – as impaired surface waters. The Salton Sea is a sump not only for the water that flows into the Sea but also for all of the salts, sediments, and other constituents dissolved in or transported by that water. The major constituents in the Sea directly influencing water quality are salts (chloride, sodium, and sulfate), nutrients (ammonia, nitrates, and phosphates), natural minerals (selenium, arsenic, and boron), agricultural pesticides and herbicides, suspended solids (sediments), and urban wastes (fecal coliform). Oxygen depletion, pH, and temperature stratification and fluctuations also impact water quality of the Sea. Synergistically, these constituents threaten the reproductive ability of some biota (particularly fish species) and may be causing other ecosystem health problems.

Several respondents indicated that more information and consideration of water quality impacts related to reduction in inflows to the Sea was needed. Specifically, concerns were expressed on potential conflicts with the goals and objectives for the proposed project/preferred alternative and compliance with Section 303(d) of the federal Clean Water Act regarding Total Maximum Daily Loads (TMDLs) for impaired surface waters in the Salton Sea Watershed. Additional water quality concerns were raised about possible impacts to the restoration effort resulting from raw sewage and other partially treated and untreated waste discharges from Mexico into the Salton Sea via the New River. Several respondents also indicated that the effects of selenium as an environmental toxicant needed to be evaluated in context with any restoration option. Moreover, many respondents asked that impacts to the fishery of the Salton Sea be analyzed with respect to the water quality concerns. A few commenters indicated that, in addition to potential water quality impacts of any restoration option, the lead agencies should also examine possible water quality effects of implementing recommended mitigation measures.

Some commenters also mentioned the desirability of and support for expansion of constructed and/or managed wetlands/deltas as part of any preferred action. Several pointed out that such managed areas could help alleviate many of the water quality concerns and would have positive ecosystem-wide benefits as well.

### **Ecosystem Restoration Alternatives Should Focus on the Salton Sea**

The QSA implementing legislation directs the lead agencies to evaluate the feasibility of implementing conservation measures necessary to protect fish and wildlife species dependent on the Salton Sea at the Sea and/or along lower Colorado River ecosystems, including the Colorado River Delta in Mexico. Scientists, environmental organizations, and bi-national resource groups support this regional-wide approach to ecosystem protection as the best way to deal with biodiversity conservation issues of highly mobile organisms (e.g., migratory waterbirds of the Pacific Flyway).

Many respondents commented that monies from the Salton Sea Restoration Fund, which are earmarked for the ecosystem restoration efforts, should not be spent anywhere but at the Salton Sea. Several commenters expressed a strong desire to limit consideration and implementation of conservation measures to areas at or around the Sea and to forgo any investigation of measures in connection with the Colorado River ecosystem. In particular, State funds should not be used for regulatory compliance activities that would be the responsibility of beneficiaries of the Lower Colorado River Multi-Species Conservation Plan (LCRMSCP). However, some respondents pointed to the possible advantages of providing funds for conservation measures identified by the LCRMSCP. Most commenters felt strongly that restoration funds should not be spent for projects in Mexico, although some commenters urged collaboration with Mexico and the International Boundary and Water Commission on bi-national restoration actions.

## Specific Comments

In addition to the main themes and issue areas described above that were expressed by many of the respondents to the NOP, specific remarks on the scope and content of the PEIR were provided by one or more commenters. Several commenters asked that an evaluation of potential effects to biological resources, threatened and endangered species, water sources and hydrology, cultural resources, visual/aesthetic resources, public access and recreation, and risks associated with the handling of dangerous or hazardous materials be included in the PEIR.

Some specific points or remarks received include:

- Maintain the Salton Sea as an agricultural drain repository. This should be included as a key objective of any restoration proposal.
- Identify impacts of any proposal that would limit the ability of irrigated agriculture in the Imperial and Coachella Valleys to discharge drainage waters into the Salton Sea, including any proposed changes in drain water quality standards.
- Consider potential impacts to resources on federal and tribal lands.
- Describe the legally authorized uses for Colorado River water allowed by the Colorado River Compact, federal laws and regulations, the 1944 Treaty with Mexico, water delivery contracts, and court rulings (collectively known as the “Law of the River”) to evaluate the legal feasibility to provide water for various restoration alternatives.
- Establish an acceptable water budget for the Salton Sea, including assumptions on projected inflows from various sources, especially the possible reduction in New River inflows to the Sea because of proposed actions in Mexico to reuse its wastewater. Factors such as variability in Colorado River water use in Imperial Valley – due to hydrologic/climatic conditions or changes in cropping patterns – must be considered in developing estimates of future Sea inflow.
- Describe the various habitats at and surrounding the Salton Sea (agricultural lands, wetlands, drains, etc.) that support the abundant bird life; analyze the potential impacts to avifauna that would result from alteration of the extent, water quality, and biota of the Sea.

- Identify a sound, scientifically supported “No Project” alternative for determining the relative merits of current and new restoration proposals; based on future hydrologic conditions, forecast likely physical and biological conditions at the Sea in the future. Also identify who is responsible for the Sea if a “no project/no action” alternative is selected.
- Summarize existing land ownership, land use and water rights that would be affected, and describe how the State would implement actions involving land or water rights it does not own.
- Develop a more informative map of the project area.
- Include the proposed “Mary Bono”/Salton Sea Authority Restoration Plan as an alternative for evaluation in the PEIR.
- Address and/or explain how other related actions – QSA water transfer mitigation, LCRMSCP, planned Mexican habitat restoration actions – fit or coordinate with Salton Sea ecosystem restoration. Identify the cumulative impacts associated with these programs and with Salton Sea restoration, such as accelerated conversion of farmland to urban land use.
- Consider multiple partial-Sea alternatives, including a South Lake alternative, and habitat enhancement alternatives that do not divide the Sea. Cost estimates for the alternatives must include operations and maintenance costs. Variations in estimated costs could make a significant difference in financial feasibility – close attention should be paid to accuracy of estimated costs.
- Include an evaluation of alternatives utilizing desalinization technologies that could augment water supplies for potential urban transfer and use. Consider evaluating an alternative that relies on agriculture to produce biomass/crops that could create energy to power desalination.
- Analyze alternatives that incorporate better agricultural water management practices in the Imperial and Mexicali Valleys.
- Investigate the feasibility of implementing non-structural restoration alternatives, such as modifying and enhancing the New and Alamo Rivers by developing a series of managed deltas and wetlands along with meandering streams and small shallow lakes – similar to a more natural, pre-1900, system that existed before irrigated agriculture was introduced to the Imperial Valley.
- The effort should focus on habitat for native species, not exotic species.
- Habitat for migratory waterfowl is important – the present Sea is too saline to be of much value to waterfowl.
- Analyze an alternative that mimics the natural cycle of the prehistoric Lake Cahuilla and Mexican Delta system, including providing for periodic fresh water flows (e.g., Colorado River flood flows to the Sea and the Delta), removal of non-native tilapia, and allowing the Sea’s salinity to fluctuate naturally including being hypersaline.
- Include cleanup of the New and Alamo Rivers in restoration efforts for the Salton Sea.
- Integrate educational opportunities about the Salton Sea and its ecosystem as part of the program objectives.
- Including the City of Brawley’s proposed Colorado River Aqueduct Desalination and Salton Sea Water Supply Project as a component of any Salton Sea ecosystem restoration strategy.
- Include an alternative for restoring the Salton Sea in the event the QSA is stopped by legal action or it does not move forward for other reasons.

- Evaluate the effects of selenium and selenium loading, at a level of detail equal to that used for salt loading and general water quality issues, for each proposed restoration alternative. This ecological analysis should be as detailed as that of engineering and economics and include models (e.g., bird use, selenium pathways, bio-accumulation) to aid in the development of realistic loading and concentration scenarios and the forecasting of biological effects.
- Perform a human health risk assessment for exposures at the Sea (e.g., inhalation of air toxics or ingestion of selenium-contaminated fish).
- Consider impacts to the Sonny Bono Salton Sea National Wildlife Refuge and the California Department of Fish and Game's Imperial Wildlife Area.
- Consider the potential impacts on privately owned and managed wetlands around the Sea for restoration alternatives.
- Evaluate potential socioeconomic impacts of the restoration alternatives, particularly those to the local agricultural economy of the Imperial and Coachella Valleys.
- Consider possible growth-inducing effects of restoration of the Salton Sea.
- Analyze the feasibility of implementing conservation measures for the Colorado River Delta in Mexico, including the need for extensive coordination with federal, state, and local governmental agencies as well as non-governmental organization and private-property owners in Mexico.
- Recognize and address potential conflicts between the restoration project and changes it may cause in the existing beneficial uses of the Salton Sea pursuant to Part 131 et seq., of Title 40 Code of Federal Regulations and the approved Water Quality Control Plan (Basin Plan) for the Colorado River Basin Region.
- Provide updated information and data on the present salinity of the Salton Sea to act as a baseline for alternative evaluation and impact analysis.
- Adopt a broad vision regarding project financing and funds that may become available for implementation of a preferred alternative; do not limit consideration of alternatives to those that can be funded by the \$300 million that may be available from the Salton Sea Restoration Fund established by SB 317 (Chapter 612, Statutes of 2003). Likewise, alternatives should also be considered that require no state funding.
- Develop a PEIR with as much site-specific and project-specific environmental analysis as possible so implementation of restoration plans for the Salton Sea is not delayed.

## Other Comments

Several respondents also included comments not directly pertinent to the scope and content of the PEIR. Some of the comments concerned the scope of the QSA implementing legislation; the desire for the Salton Sea Authority to assume a larger role in the ecosystem restoration planning effort; and, the importance of and need for improved the public input and participation during preparation of the PEIR. Some of the comments received included:

- The QSA implementing legislation too narrowly defines the project goals and objectives. New legislation should be enacted to include more direct benefits for people around the Sea and not just fish and wildlife.

- Restoration planning should advance the socio-economic mitigation objectives of the QSA water transfers, and should advance socio-economic improvement opportunities in both Mexico and the United States.
- The Salton Sea Authority should continue to provide policy direction and have shared decision-making authority over restoration planning for the Salton Sea; they should remain lead agency for identifying and implementing corrective measures to preserve beneficial uses of the Sea.
- Available funding should be directed/redirected to the Salton Sea Authority for remediation efforts specifically related to the Salton Sea.
- Current restoration efforts by the State duplicate efforts already completed or in process by the Salton Sea Authority and the U.S Bureau of Reclamation.
- Conduct additional scoping meetings in the Coachella and Imperial Valleys, plus at least one public scoping meeting in a community alongside the Salton Sea.
- Establish a detailed process for soliciting input from local communities; residents living alongside the Sea must be actively consulted in the development of any restoration alternative.

## **APPENDIX**

(Written Comments Received on the NOP)